This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for providing notifications of changes in a database system, comprising:

receiving a plurality of query statements for querying a database system, each query statement corresponding to a computing application that has subscribed to receive notification of changes in the database system affecting data retrieved from the database system by the computing application;

creating a subscription template from the plurality of query statements;

generating a parameter table from the plurality of query statements, the parameter table comprising for each query statement a constant representing a query value and a subscription identification value uniquely identifying a subscription associated with the particular query statement;

~~parameterizing the subscription template to generate a parameter table; and~~

in response to a change in the data in the database, performing a join between said parameter table and said ~~parameterized~~ subscription template to generate a query;

executing the query on the database system to identify query statements in the plurality of query statements affected by the change in the data in the database; and

communicating notification to a computing application corresponding to an identified query statement, said notification indicating a change in the data in the database has occurred.

2. (Currently amended) The method as recited in claim 1, further comprising ~~executing an action upon performing the join, wherein the action comprises any of: performing a query and~~ communicating data from the database system to the computing application ~~cooperating computing applications~~.

3. (Canceled)

4. (Currently Amended) The method as recited in claim 1 ~~3~~, further comprising retrieving data from the database system.

5. (Currently Amended) The method as recited in claim 4, further comprising communicating the data retrieved from the database system to ~~cooperating services and/or~~ the computing application, said updated data reflecting the change in the data in the database ~~applications~~.

6. (Canceled)

7. (Currently Amended) The method as recited in claim 1 ~~6~~, further comprising associating the subscription identification value with a subscriber.

8. (Cancelled)

9. (Original) The method as recited in claim 1, further comprising adding additional parameters to the parameter table, wherein the additional parameters are not based on the created subscription template.

10. (Previously presented) A computer readable medium having computer readable instructions to instruct a computer to perform the a method as recited in claim 1 for providing notifications of changes in a database system comprising:

receiving a plurality of query plans for querying a database system, each query plan corresponding to a computing application that has subscribed to receive notification of changes in the database system effecting output from the database system to the computing application;

creating a subscription template from the plurality of subscription plans;

generating a parameter table from the plurality of query plans, the parameter table comprising for each query plan a constant representing a query value and a subscription plan identification value uniquely identifying a subscription associated with the particular query plan;

~~parameterizing the subscription template to generate a parameter table; and~~

in response to a change in the data in the database, performing a join between said parameter table and said ~~parameterized~~ subscription template to generate a query;

executing the query on the database system to identify query plans in the plurality of query plans affected by the change in the data in the database; and

communicating notification to a computing application corresponding to an identified query plan, said notification indicating the change in the data in the database has occurred.

11. (Previously presented) A system to increase subscription scalability in an electronic database environment comprising:

a database system, the database system capable of accepting and processing subscriptions by cooperating services and/or computing applications, the subscriptions offering query templates for execution on database system to retrieve desired data;

a notification manger, the notification manager operating on the database system to identify changes in data in the database system and to provide notifications to the cooperating services and/or computing applications of database system changes; ~~and~~

an optimization module, the optimization module using queries originating from subscribers to create subscription templates which are paramterized to create a parameter table, said parameter table comprising for each query a constant representing a query value and a subscription identification value uniquely identifying a subscription associated with a particular query,

wherein said notification manager is adapted to: join ~~wherein in~~ the parameter table ~~is joined~~ with at least one of the subscription templates to generate a notification query,

execute the notification query on the database system to identify queries affected by changes in the database system, and

communicate notification to a computing application corresponding to an identified query, said notification indicating a change in the data in the database has occurred.

12. (Original) The system as recited in claim 11, wherein the optimization module comprises a computing application.

13. (Original) The system as recited in claim 11, further comprising a communication means, the communication means for use in communicating data between the database system and the cooperating services and/or computing applications.

14. (Original) The system as recited in claim 12, further comprising a spool, the spool used to spool subscription queries.

15. (Original) The system as recited in claim 14, further comprising a filter, the filter used to filter out subscription queries.

16. (Canceled)

17. (Original) The system as recited in claim 11, wherein the notification manager and the database system reside in the same data environment.

18. (Original) The system as recited in claim 17, wherein the notification manager, the database system, and the optimization module reside in the same environment.

19. (Original) The system as recited in claim 11, wherein the parameter tables comprises any of query constants, subscriber identification information, and subscriber routing information.

20. (Currently amended) A method for increasing subscription scalability in electronic data environments comprising:

accepting subscriptions from cooperating services and/or computing applications by a database system;

processing the subscriptions to generate query templates, the query templates having queries;

parameterizing the query templates to generate a parameter table, said parameter table comprising for each query a constant representing a query value and a subscription identification value uniquely identifying a subscription associated with the particular query; ~~and~~

in response to a change in the data in the database, joining the parameter table with the query templates to generate a notification query;

executing the notification query on the database system to identify queries affected by the change in the data in the database; and

communicating notification to a computing application corresponding to an identified query, said notification indicating the change in the data in the database has occurred.

21. (Original) The method as recited in claim 20, further comprising spooling the query templates.

22. (Original) The method as recited in claim 21, further comprising filtering the query templates.

23. (Canceled)

24. (Original) The method as recited in claim 23, further comprising communicating the results of the notification query to the cooperating services and/or computing applications.

25. (Original) The method as recited in claim 20, further comprising adding parameters to the parameter table not originating from the query templates.

26. (Currently amended) A computer readable medium having computer readable instructions to instruct a computer to perform a method for increasing subscription scalability in electronic data environments comprising:

accepting subscriptions from cooperating services and/or computing applications by a database system;

processing the subscriptions to generate query templates, the query templates having queries;

parameterizing the query templates to generate a parameter table, said parameter table comprising for each query a constant representing a query value and a subscription identification value uniquely identifying a subscription associated with the particular query; ~~and~~

in response to a change in the data in the database, joining the parameter table with the query templates to generate a notification query;

executing the notification query on the database system to identify queries affected by the change in the data in the database; and

communicating notification to a computing application corresponding to an identified query, said notification indicating the change in the data in the database has occurred.